

Enquiry No- 77/23/6110/SUM

Date- 5-Sep-24

BHEL invites offers from reputed Suppliers as per following terms and conditions -

1. Tender Type	Open Tender (Domestic-Indian)			
2. Mode of Enquiry	E - PROCUREMENT			
3. Project	Framework Agreement (Rate Contract) of FLOW ELEMENT - ORIFICE			
4. Executing Agency	BHEL-PEM			
5. Package	FLOW ELEMENT - OR	FLOW ELEMENT - ORIFICE		
6. Whether Package is DIVISIBLE or NON - DIVISIBLE	DIVISIBLE			
7. Due Date & Time	16 September 2024	2:00 PM		
8. Earnest Money Deposit (EMD)	Not Applicable			
9. Tender Cost	NIL			
10. Numbers of Part bid	2-Part bid (Techno-Commercial and Price Bid)			
11. Technical Scope	As per Tech. Spec No: PE-TS-20-145-H105A REV No. 00			
12. Pre-Bid clarifications	Suppliers to contact BHEL-PEM (over phone/ mail/ visit-BHEL-PEM) for any clarification (Technical or Commercial) at least 05 days before the due date of Tender opening & get it clarified well before due date, so that offers by the Suppliers may be submitted within the due date & time.			
13. Prequalification Requirement	Financial PQR-NO	Technical PQR- YES		
14. Delivery terms	For Supply Portion: FO	R Despatch Station		
15. Delivery Schedule: -				
Engineering	Drawing/ documents submission & re-submission schedule shall be as per Technical Specification: PE-TS-20-145-H105A REV No. 00			
Main Supply (" A")	200 days from the date of PO (for Unit-1, Unit-2 and common area) Additional 90 days for one or two additional unit i.e. 290 days in case of 3 and 4 units.			

Notes:

- a. Supplier to start manufacturing/supply only after getting the applicable engineering Drgs. /docs approved from BHEL/End Customer.
- b. Drawings /documents submission/re-submission schedule shall be as per Technical specification (PE-TS-20-145-H105A REV No.00) which shall be used for progress monitoring purpose and required course correction, if any.
- c. The delivery date specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule.
- d. The delivery conditions specified are for contractual purposes. However, to meet project requirement, BHEL may ask for early deliveries without any compensation thereof.



2.0 Validity of contract placed on basis of Framework Agreement (Rate Contract) for individual projects (PO rates, terms and conditions):

Vendor has to make supply of goods/services as per the delivery time mentioned above. However, due to unavoidable circumstances if delay happens in providing inputs/ clearances (inputs, Engineering approvals, deputing inspector for inspection, issuance of MDCC and any hold imposed owing to site issues etc.) for which delivery time extension is admissible as per point no.3, in such situation it shall be obligatory at vendor part to execute the contract at PO rates, terms and conditions where inputs/ clearances has been accorded within validity of contract. Validity period for various activities shall be as defined below or as mentioned in the NIT.

2.1 Contract for main supply shall be valid for **365** ('C') days from the PO date. In case of more than 2 units, validity period will be increased by supply time considered for subsequent units. However, delay at vendor's end (if any) shall be added to the validity period and contract validity shall get extended by the delay period at vendor's end.

For example: Original Delivery period for main supply: A (in days)

Delay at vendor's end: B (in days beyond "A" days)

Contract validity: C+B (in days)

Notes:

- a. B is the Vendor delay days beyond original contractual delivery period for main supply /extended delivery period owing to time taken by BHEL.
- b. Main supply, applicable in the contract released/ cleared for manufacturing within contractual validity period, to be supplied by vendor/supplier at PO rates, terms and conditions.
- c. Execution of the contract quantities released beyond contract validity period shall be decided on mutual consent basis at PO rates, terms and conditions.



3.0 Delivery Extension: Extension of contractual delivery time:

Delivery time mentioned in the NIT includes Engineering completion time (time for drawing/document submission/resubmission by the vendor and review/approval of the same by the BHEL/End customer), manufacturing, inspection, Packing and dispatch time. Due diligence is to be observed by the vendor to ensure timely completion of engineering and supply.

During the execution of the contract, time loss occurred owing to the reason attributable to BHEL besides force majeure shall be considered for delivery time extension to the vendor as given below: -

- i. Any Delay in providing comments/ approval on Primary drawing/documents beyond the stipulated time as specified in NIT.
- ii. Time Loss in approval of the drawing/document as a result of increase in the iteration not attributable to the vendor (i.e. resubmission owing to end customer comments) as certified by BHEL. Time extension equivalent to the resubmission time noted in the tech. spec and consequential increase in the approval time in lieu of increase in iteration shall be applicable. However, for incomplete re- submission time loss shall be in vendor account.
- iii. Delay in providing engineering input/material by BHEL.
- iv. Delay in deputing inspector for inspection and delay in release of MDCC in line with GCC
- v. Any hold put by BHEL for whatever reasons during execution of contract (within contract validity period), time extension equivalent to hold period shall be admissible. However, in the event hold period continues for more than 30 days then, an additional fifteen days for the purposes of mobilization and demobilization of resources shall also be admissible.

Note: Extension in delivery period if any with or without imposition of LD shall be considered after detailed delay analysis based on provisions given above. However, no delay analysis will be applicable if supply is completed within delivery schedule as specified in Purchase order.

16.	Liquidated Dan	nages: As per	: Clause N	No-16.0 of	General	Commercial	Terms &	Condition of	f GCC Rev
	07								

17. **Guarantee Terms:** As per Clause No-12.0 except Clause no 12.2 (b) of General Commercial Terms & Condition of GCC Rev 07

18. Validity of offer shall be as per Clause no. 7 (Instruction to Suppliers) of GCC Rev 07.

19. CIF Content	Not Applicable
20. Integrity Pact Applicability	YES

21. In line with Cl. No. 12 of (ITB) GCC Rev07, following Independent External Monitors (IEMs) have been appointed by BHEL.

Shri Otem Dai, IAS (Retd.) (iem1@bhel.in)

Shri Bishwamitra Pandey, IRAS (Retd.) (iem2@bhel.in)

Shri Mukesh Mittal, IRS (Retd.) (iem3@bhel.in)

22. Performance Security		No Performance Security (PS) against the current
		enquiry for Framework Agreement (Rate Contract)
(PS)	PS Applicability	for Tender package.
(F3)		However, Suppliers to note that Performance
		Security shall be submitted for orders placed by



Project Groups of BHEL-PEM on the Framework Agreement (Rate Contract). Successful Supplier/s will have to submit Performance Security for each POs (irrespective of value) which will be placed under the Framework Agreement (Rate Contract) finalised through this tender considering FA (RC) as original contract as per the format given in GCC Rev 07. Relevant details of the PS to be submitted on the
basis of Framework Agreement (Rate Contract) as following:
Validity of PS : As per clause no-11.0 of General Commercial Terms and Conditions of GCC Rev-07.
PS Submission: PS should be in favour of BHEL-PEM. Supplier may opt any of the following for submission of Performance Security: -
Initially 10% of the contract value (total Ex-works price). However, 5% of the contract value (as above) will be released after completion of Main Supply based on certification by Project Group/Purchaser.
OR
5% of the contract value (total Ex-works price). Additional 5% of the contract value will be retained from first bill & subsequent bill(s) of the same contract. The retention amount will be released after completion of Main Supply based on certification by Project Group/ Purchaser.



Modes of Deposit	Performance security may be furnished in the following forms: a) Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favour of BHEL. b) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL. c) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL). d) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL). e) Insurance Surety Bond. (Note: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith) Performance Security is to be furnished within 14 days from the date of PO and it should remain valid for a period of 60 (sixty) days beyond the date of
	Performance Security is to be furnished within 14 days from the date of PO and it should remain valid
Remarks for PS	a) The performance security will be forfeited and credited to BHEL's account in the event of a breach of contract by the supplier. b) Performance security should be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60 (sixty) days of completion of all such obligations including the warranty under the contract.
	The Performance Security shall not carry any interest.



23. Breach of contract,
Remedies and
Termination (Tenderer to
note that this clause will
supersede any clause
regarding recovery
amount from Tenderer
due to Breach on contract
mentioned anywhere in
GCC Rev07 and its
Corrigendum)

In case of Breach of Contract, BHEL shall recover 10% of the contract value from the Supplier using following instruments:

- (i) Encashment of security instruments like EMD, Performance Security with executing agency (PEM) against the said contract.
- (ii) Balance amount (if value of security instruments is less than 10% of the contract value) from other Financial remedies i.e. available bills of the Supplier, retention amount etc. with executing agency (PEM).
- (iii) Balance amount from security instruments like EMD, Performance Security and other Financial remedies i.e. available bills of the Supplier, retention amount etc. with other units of BHEL.
- (iv) If recovery is not possible then legal remedies shall be pursued.

However, Supplier shall continue performance of the Order/ Contract, under all circumstances, to the extent not cancelled.

24. **Tender Evaluation – Price will be finalized through RA** The evaluation currency for this tender shall be INR. Evaluation will be done on overall L1 (Total Package Price including Freight excluding taxes) basis with necessary loading as applicable.

In the course of evaluation, if more than one Supplier happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 Suppliers.

In case more than one Supplier happens to occupy the L-1 status even after soliciting discounts, the L-1 Supplier shall be decided by a toss/ draw of lots, in the presence of the respective L-1 Supplier (s) or their representative(s). Ranking will be done accordingly. BHEL's decision in such situations shall be final & binding.

25. Terms & Conditions: - The Terms & Conditions shall be as per enclosed Special Conditions of the Contract (copy enclosed), GCC Rev 07 & Corrigendum 01 to GCC Rev-07 which is available on www.pem.bhel.com and other Terms and Conditions included in this Enquiry Letter.

26. Payment Terms:

For Main Supply: As per clause No. 9.1 of General Commercial Terms and Conditions of GCC, Rev -07.

For Calibration Charges: As per clause No. 9.5 of General Commercial Terms and Conditions of GCC, Rev -07.

27. Reverse Auction:

BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com on "Supplier registration page") for this tender. RA shall be conducted among all the Techno-Commercially qualified Suppliers.

Price Bids of all the Techno-Commercially qualified Suppliers shall be opened and same shall be considered as initial bids of Suppliers in RA. In case any Supplier(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.

- 28. Supplier to note that this is an Open Tender enquiry & Reverse Auction participation shall be subject to following condition:
 - a. Qualifying Technical Pre-Qualification Requirement.
 - b. Techno-Commercial acceptance of offer by BHEL-PEM.



c. Registration in BHEL-PEM for the Tender package.

The Suppliers who are not registered with BHEL-PEM may apply for registration in BHEL-PEM through Registration Portal available at https://pem.bhel.com/Bhel_Supplier_section.aspx >online supplier registration (https://supplier.bhel.in/). All credentials and/ or documents duly signed & stamped related to registration has to be uploaded on the website & submit the application for registration. One set of hard copy filled-up SRF downloaded from Online Registration Portal duly signed & stamped has to be submitted.

- 29. Clause no 9.6 (excluding Notes) of GCTC of GCC Rev. 07 shall be read as-
 - "Suppliers shall submit billing documents for payment directly to BHEL. Payment will be released within days as mentioned below after submission of complete documents as per clause no 9.7.2 9.7.5:
 - a. 90 days for non-MSME as per MSMED Act.
 - b. 45 days for Suppliers qualified and registered as Micro and Small Enterprises MSEs as per MSMED Act.
 - c. 60 days for Suppliers qualified as Medium Enterprises as per MSMED Act."
- 30. Suppliers are requested to refer clause no 26.0 (Make in India) of instructions to Supplier of GCC Rev 07. Further, following shall be taken into consideration for submitting bids by Suppliers:
 - For this procurement, Public Procurement (preference to make in India), order 2017 dtd. 15.06.17, 28.05.18, 29.05.19, 16.09.20 & 19.07.24 and subsequent orders issued by the respective nodal ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT. In the event of any nodal ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable. Suppliers are requested to go through the above-mentioned orders and submit their in adherence to Public Procurement (preference to make in India), order 2017 dtd. 15.06.17, 28.05.18, 29.05.19, 16.09.20 & 19.07.24 and subsequent orders.
 - Minimum Local Content prescribed for Tender package by Nodal Ministry is 70% and hence for this procurement, as per Public Procurement (preference to make in India), order 2017 dtd. 15.06.17, 28.05.18, 29.05.19, 16.09.20 & 19.07.24 and subsequent orders issued by the nodal ministry, this package is reserved for only Class-I supplier having Minimum local Content 70%. Class-II and Non-Local suppliers are not eligible to quote for this enquiry.
- 31. Purchase preference to MSE Supplier: Yes.
- 32. Framework Agreement (Rate contract) shall be done with 2 suppliers in ratio of 70:30 at L1 FOR site price (Ex-works + freight) for this package. For splitting order, L1 Rates (Ex works + Freight) shall be counteroffered to remaining techno-commercially approved Suppliers.
- 33. GOI circular dated 18.05.2023 for Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017 shall be applicable for order splitting and order finalization.
- 34. If none of the Supplier accepts counteroffered L1 Rates (Ex works + Freight), then contract shall be awarded to L1 Supplier for 100% value.
- 35. All corrigenda, addenda, amendments, time extensions, clarifications, etc. to the tender will be hosted on BHEL website (www.bhel.com), https://eprocurebhel.co.in/nicgep/app & BHEL-PEM website (https://pem.bhel.com/Home.aspx). Suppliers should regularly visit websites to keep themselves updated.



- 36. If Supplier mentions Not Applicable/ Not Required/ Not Quoted in BHEL price format, the same to be substantiated by the Supplier. If such item is required to be supplied for system completion in future, same will be supplied free of cost.
- 37. All other correspondence thereof shall be addressed to the undersigned by name & designation and sent at the following address:

Manish Kumar Sinha/ Sr. Mgr.-CMM M/s Bharat Heavy Electricals Ltd.,

Project Engineering Management, Power Project Engineering Institute,

HRD & ESI Complex,

Plot No 25, Sector-16 A, Noida-201301

E-MAIL: manish.sinha@bhel.in

Ph. No. 0120-6748120

Kumar Suman Saurabh/ Mgr.-CMM M/s Bharat Heavy Electricals Ltd.,

Project Engineering Management, Power Project Engineering Institute,

HRD & ESI Complex,

Plot No 25, Sector-16 A, Noida-201301

E-MAIL: sumansaurabh@bhel.in

Ph. No. 9718771765

- 38. GST shall be payable extra at actual as per the HSN code finalized for the items during detailed BBU.
- 39. GeM Seller ID shall be mandatory before placement of order/ award of contract to the successful Supplier.
- 40. Suppliers to quote freight charges in percentage of their quoted Total Ex-works Prices. Supplier to quote non-zero freight % for supply.
- 41. Over all (%) quantity variation: The variation on overall package value shall be limited to +/-30%
- 42. Suppliers shall Quote for the entire Scope. Partial scope is not acceptable.
- 43. Suppliers to ensure that Third party/ Customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document/ certificate issuing authority such as name & designation of Issuing Authority and its organization contact number and e mail Id etc. Offer of only those Suppliers shall be considered further, who meets the PQR criteria. Suppliers to furnish latest verification details for checking veracity of document(s) by BHEL. In case the same found not available, Purchaser has right to reject such document from evaluation. Format for the same is below: -

Sl. No.	Project	Customer Name,	Contract/	Value of	Brief of	Completion
	Name	Contact Address,	Order No.	Contract/	Work	Date
		Phone No. & Email ID		Order		

- 44. Self-declarations/ auditor's/ accountant's certificates submitted by the manufacturer/ supplier may be verified randomly by the committee constituted as per MoP Order 28-07-2020. In case of false documents/ misrepresentation of the facts requisite action against such manufacturer/ supplier will be taken based on the recommendation of the Committee
- 45. Suppliers to comply Govt. of India, Ministry of Power, Order no.-25-111612018-PG dated 02/07/2020 regarding mandatory testing of all the Imported items/ Equipment's/ Components.
- 46. This item/ Package falls under the list of items defined in Para 3 of Ministry guideline ref no. F.20/2/214-PPD(Pt.) dated 20-09-2016 (in respect of procurement of items related to public safety, health, critical security operations and equipment's, etc.) & hence no relaxation of PQR for start-up/ MSME Suppliers is envisaged for the items/ Package.



- 47. The Supplier declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Supplier(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Supplier is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines
- 48. The offers of the Suppliers who are under suspension as also the offers of the Suppliers, who engage the services of the firms debarred across BHEL, shall be rejected. The list of firms debarred across BHEL is available on BHEL web site www.bhel.com.
 - 1.0 Integrity commitment, performance of the contract and punitive action thereof:
 - 1.1. Commitment by BHEL: BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Supplier(s) in a transparent and fair manner, and with equity.
 - 1.2. Commitment by Supplier/ Supplier/ Contractor:
 - 1.2.1. The Supplier/ supplier/ contractor commits to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.
 - 1.2.2. The Supplier/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.
 - 1.2.3. The Supplier/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any Supplier/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in malpractices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such Supplier/ supplier/ contractor as per extant guidelines of the company available on www. bhel.com and/or under applicable legal provisions".

- 49. A Supplier shall not have conflict of interest with other Suppliers. Such conflict of interest can lead to anticompetitive practices to the detriment of Procuring Entity's interests. The Supplier found to have a conflict of interest shall be disqualified. A Supplier may be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - a) they have controlling partner (s) in common; or
 - b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
 - c) they have the same legal representative/ agent for purposes of this bid; or
 - d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Supplier; or
 - e) Supplier participates in more than one bid in this bidding process. Participation by a Supplier in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ assemblies from one bidding manufacturer in more than one bid, or
 - f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/ dealer. There can be only one bid from the following:
 - 1. The principal manufacturer directly or through one Indian agent on his behalf; and
 - 2. Indian/ foreign agent on behalf of only one principal,



- g) A Supplier or any of its affiliates participated as a consultant in the preparation of the design or Technical specifications of the contract that is the subject of the Bid, or
- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/ management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Suppliers must proactively declare such sister/ common business/ management units in same/ similar line of business.
- 50. All the above terms and conditions, post-bid agreements/ MoMs (during Techno- Commercial evaluation) shall automatically become a part of the Order/Contract after its finalization.
- 51. Suppliers to note that offers shall be submitted strictly in accordance with the requirements of tender documents. Suppliers shall upload their complete offer meeting the requirements of the tender documents on e-procurement portal https://eprocurebhel.co.in/nicgep/app.

Following documents need to be uploaded:

- Offer forwarding/ Covering letter with Un-price bid, DEVIATION SHEET (COST OF WITHDRAWAL).
- Documents required for meeting Technical PQRs.
- Land Border certificate compliance as per DOE circular dated 23.02.2023.
- Integrity pact.
- Price bid along with Annexure-II on e-procurement portal https://eprocurebhel.co.in/nicgep/app
- 52. It shall be the responsibility of the Supplier to ensure that the tender is uploaded on or before the due date and time. Late offers are not accepted.
- 53. All other terms and conditions shall be as per Special Conditions of Framework Agreement (Rate Contract), and GCC Rev07 & Corrigenda-01 to GCC Rev 07.

In the event of any contradiction in the terms and conditions mentioned, the order of preference shall be as mentioned in clause no 36 of GCTC of GCC (Rev.07).

Note: - In case you are not making an offer against this enquiry, you are requested to send a regret letter so as to reach us on or before the due date.

RATE CONTRACT

TECHNICAL SPECIFICATION FOR FLOW ORIFICE ASSEMBLY

SPECIFICATION No. PE-TS-20-145-H105A REV NO. 00



BHARAT HEAVY ELECTRICALS LIMITED POWER SECTOR PROJECT ENGINEERING MANAGEMENT NOIDA, INDIA



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PROJECT INFORMATION

SL.NO	DESCRIPTION	DETAILS
1	CUSTOMER	
2	LOCATION	
2.1	COORDINATES	
2.2	NEAREST RAILWAY STATION	
2.3	NEAREST SEA PORT	
2.4	NEAREST AIRPORT]
2.5	NEAREST NATIONAL HIGHWAY	PROJECT SPECIFIC REQUIREMENT SHALL
3	METEOROLOGICAL DATA	BE FURNISHED LATER
3.1	MAXIMUM TEMPERATURE	DE I OKNONED EXTERN
3.2	MINIMUM TEMPERATURE	
3.3	RELATIVE HUMIDITY (FOR DESIGN)	
3.4	AVERAGE ANNUAL RAINFALL	
3.5	SEISMIC ZONE (AS PER IS 1893)	
3.6	HEIGHT ABOVE MSL	



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SCOPE OF THIS PACKAGE COVERS THE FOLLOWING:

SL.NO	PARAMETERS	REQUIREMENT
1	Supply Including Design, Engineering, Manufact	uring of
a)	Main Supply	YES
b)	Commissioning Spares	YES
2	Painting	YES
3	Inspection & Testing	YES
4	Packing	YES
5	Transportation & Delivery To Site	YES
6	Erection & Commissioning	NO
7	Supervision of Erection & Commissioning	NO
8	Performance Guarantee (PG) Test	NO
9	Mandatory Spares	NO
10	O & M Service	NO
11	O & M Spares	NO



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GENERAL TECHNICAL REQUIREMENT

1.0	It is not the intent to specify herein all the details of design and manufacturing. The equipment shall conform in all respects to high standards of design, engineering and workmanship and shall be capable of performing the required duties in a manner
1.0	acceptable to purchaser who will interpret the meaning of drawings and specifications and shall be entitled to reject any work or material which in his judgement is not in full accordance herewith.
2.0	Bidder shall also ensure that the offered equipment shall comply with all applicable statutory and regulatory requirements.
3.0	In the event of any conflict between the requirements of two clauses of this specification, documents or requirements of different codes and standards specified, the more stringent requirement as per the interpretation of the owner shall apply.
4.0	Drawing/document submission shall be through web based Document Management System(DMS) of BHEL. Bidder would be provided access to the DMS for drawing/document submission. Bidder to ensure internet connectivity of min speed of 2Mbps at their end.
5.0	Drawings/ documents submitted by vendor at any stage shall be complete in all respects. Any incomplete drawing submitted shall be treated as non- submission with delays attributable to vendor. For any clarification/ discussion required to complete the drawings, the bidder shall depute his personnel to BHEL / Customer's Office as per the requirement for across the table submission/ finalizations of drawings.
6.0	Latest codes and standards shall be complied with as on date.
7.0	Bidder shall submit Quality Plan in the event of order based on the Quality Plan enclosed herein. QP will be subject to BHEL / CUSTOMER approval & customer hold points for inspection / testing shall be marked in the QP at the contract stage.
8.0	In case, the bidder is sourcing the item/any component from outside India, the third party inspection shall be arranged by bidder at their cost and shall be deemed to be considered by the bidder in their offer without any delivery impact.
9.0	Document approval by BHEL / Customer shall not absolve the supplier of their contractual obligations of completing the work as per specification requirement without any commercial and delivery impact.
10.0	Equipment must be safe, reliable and easy to maintain at all operating conditions
11.0	The Orifice plates shall be of concentric type, designed and manufactured as per ISO 5167. The data sheet enclosed specifies the requirements of each orifice plate assembly. The bidder shall calculate the Beta ratio and validate suitability of the selected design for the specified application.
12.0	Orifice plates shall be supplied as complete assemblies along with companion flanges on both sides having proper end connection, nut & bolt, stub, nipples, plug, pair of gaskets. Concentric Square edge orifice shall be provided with downstream beveled edge.
13.0	Each orifice plate assembly will also be provided with an extended handle. The Tag No., Element material, service, beta ratio, pipe size & thickness, flow direction will be permanently marked on both the sides of this handle.



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14.0	Orifice Plate thickness shall be >= 3.18 mm (min.) for pipes having diameter <= 250 mm and shall be >=6.35 mm (min.) for pipes having diameter <500 mm and shall be >=10mm (min.) for pipes having diameter >= 500 mm unless otherwise specified for a specific project.
15.0	Flanges shall be manufactured from forged material.
16.0	Root valves is in BHEL Scope conforming to ASME B16.34.
17.0	Nipple is in bidder's scope and shall be supplied loose. Nipple should match with flange stub as well as BHEL supplied root valve of 15NB size.
18.0	For vertical installation of ORIFICEs (if any) as per technical data sheet, the S-bend impulse pipe shall be supplied by the bidder without any commercial implication.
19.0	Flanges: The flanges shall conform to latest revisions of ANSI B 16.5 / ASME B16.36 / ASME B16.47 (B). The companion flange and the carrier ring material shall be same as that of the main pipe. These shall be manufactured from forged material. Companion flanges shall be suitably rated for the specified service conditions.



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Rev. No. 00

Date : 20 JULY'24

SPECIFIC TECHNICAL REQUIREMENT

This specification is intended for finalization of rate contract between BHEL-PEM and Bidder. Standard technical detail as indicated in the specification shall be agreed upon between BHEL-PEM and Bidder. Project specific technical detail shall be made available to the bidder along with project enquiry. This specification covers the Design, Manufacture, Calibration (at approved labs), Inspection and testing at manufacturer's works, proper packing for transportation and delivery to site of the complete Orifice Plate assembly, Start-up/Commissioning Spares as mentioned in different sections of this specification. The bidds shall be evaluated as per NIT. Ordering shall be done separately for each project. The bidder to quote for items as per price schedule attached. The quantity as mentioned in the BOQ is only for evaluation purpose. However actual ordered quantity may vary from project to project throughout the year. BHEL's / Customer representatives shall be given access to the shop in which the equipment's are being manufactured or tested and all test records shall be made available to them. The Equipment covered under this specification shall not be dispatched unless the same have been finally inspected, accepted and Material Dispatch Clearance Certificate (MDCC) is issued by BHEL / Customer. The quality plan enclosed forms the minimum requirement but not limited to be adhered to by the bidder. Inspection shall be carried out in line with preapproved project specific drawings/data sheet/QP. Quality plan to be duly signed and stamped and to be furnished along with the bid as a token of acceptance. Any deviation w.r.t Quality Plan shall not be acceptable and bid / offer shall be rejected. Wherever in data sheet more than one options are marked, bidder to comply for all the options. However, bidder to note that one option shall be selected by BHEL for a specific project and the same shall be supplied by bidder without any commercial implication with respect to rate contract. In case of any discrepancy in		
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adhered to by the bidder. Inspection shall be carried out in line with preapproved project specific drawings/data sheet/QP. Quality plan to be duly signed and stamped and to be furnished along with the bid as a token of acceptance. Any deviation w.r.t Quality Plan shall not be acceptable and bid / offer shall be rejected. Wherever in data sheet more than one options are marked, bidder to comply for all the options. However, bidder to note that one option shall be selected by BHEL for a specific project and the same shall be supplied by bidder without any commercial implication with respect to rate contract. In case of any discrepancy in the requirement within the same or different section, as noted by the bidder in the specification, the same will be brought to the notice of BHEL in the form of pre- bid clarification. In absence of any pre-bid clarification, the more stringent requirement as per interpretation of BHEL/customer shall prevail without any commercial implication. Scope of supply shall include flow element orifice assembly including flange with nut	6.0	same have been finally inspected, accepted and Material Dispatch Clearance
Sheet/QP. Quality plan to be duly signed and stamped and to be furnished along with the bid as a token of acceptance. Any deviation w.r.t Quality Plan shall not be acceptable and bid / offer shall be rejected. Wherever in data sheet more than one options are marked, bidder to comply for all the options. However, bidder to note that one option shall be selected by BHEL for a specific project and the same shall be supplied by bidder without any commercial implication with respect to rate contract. In case of any discrepancy in the requirement within the same or different section, as noted by the bidder in the specification, the same will be brought to the notice of BHEL in the form of pre- bid clarification. In absence of any pre-bid clarification, the more stringent requirement as per interpretation of BHEL/customer shall prevail without any commercial implication. Scope of supply shall include flow element orifice assembly including flange with nut	7.0	, , , , , , , , , , , , , , , , , , ,
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the options. However, bidder to note that one option shall be selected by BHEL for a specific project and the same shall be supplied by bidder without any commercial implication with respect to rate contract. In case of any discrepancy in the requirement within the same or different section, as noted by the bidder in the specification, the same will be brought to the notice of BHEL in the form of pre- bid clarification. In absence of any pre-bid clarification, the more stringent requirement as per interpretation of BHEL/customer shall prevail without any commercial implication. Scope of supply shall include flow element orifice assembly including flange with nut	9.0	a token of acceptance. Any deviation w.r.t Quality Plan shall not be acceptable and
noted by the bidder in the specification, the same will be brought to the notice of BHEL in the form of pre- bid clarification. In absence of any pre-bid clarification, the more stringent requirement as per interpretation of BHEL/customer shall prevail without any commercial implication. Scope of supply shall include flow element orifice assembly including flange with nut	10.0	the options. However, bidder to note that one option shall be selected by BHEL for a specific project and the same shall be supplied by bidder without any commercial
	11.0	noted by the bidder in the specification, the same will be brought to the notice of BHEL in the form of pre- bid clarification. In absence of any pre-bid clarification, the more stringent requirement as per interpretation of BHEL/customer shall prevail
	12.0	1 ' '''



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13.0	Bidder to note that thickness of the pipe for various sizes may vary from project to project Same shall be informed during project specific order. No commercial implication shall be acceptable for the same.
14.0	Bidder to note that CALIBRATION TEST is required to be conducted on one type per size for a specific project and the requirement shall be informed during project specific order. BHEL reserves the right to withdraw the calibration test for any project based on customer requirements.
15.0	For vertical installation of Orifices (if any), the S-bent impulse pipe shall be supplied by bidder without any commercial implication. The same shall be informed by BHEL during project specific order.
16.0	Process pressure, temperature & flow may vary for a particular service from project to project. Bidder to comply with these process parameters without any commercial implication. Maximum possible design pressure & temperature shall be informed during project specific order.
17.0	Extra pressure tapping (in addition to THREE pair no's tapping) shall be provided in case to case basis for a specific project (if required) by the bidder without any commercial implication. Associated accessories for this particular extra tapping like nipple shall be supplied by the bidder as per the unit price quoted in the price format.
18.0	If extra Nipples etc are to be provided, same shall be supplied by the bidder as per the unit price quoted in the price format.
19.0	Inspection will be conducted by BHEL, end customer and/or their authorized representatives as per the agreed inspection schedule. The inspection schedule will be submitted by the bidder for BHEL's approval at contract stage. The cost of all tests and inspections will be deemed to have been included in the rate contract. For all the type tests "Type Test Certificates" shall be furnished. In the absence of the same, such Type Tests shall be arranged at the Vendor's works in the presence of BHEL, end customer and/or their authorized representatives or in independent Test House/ Laboratory approved by BHEL.



SPECIFICATION NO.: PE-TS-20-145-I105A

REV. NO.

00

DATE: 20 JULY'2024

Tag No. : ORIFICE ASSEMBLY AS PER TYPE "A" OF THE PRICE FORMAT Date Sheet No. 1

	D. m. co	TER/E A
	DATA SH	IEET – A
ELEMENT	SERVICE MAKE: MODEL TYPE STANDARD* DESIGN# MATERIAL BETA RATIO BORE DIAMETER VENT HOLE DRAIN HOLE	SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT [IIII] BS-1042 / [IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
END CONNECTION	TYPE FLANGE TYPE FLANGE RATING: MATERIAL TAPPING LOCATION NUMBER OF TAPPINGS NIPPLE: QTY: SIZE: MATERIAL: RATING ROOT VALVE QTY.	[■] FLANGED, [■]BUTT WELD END WELDNECK ANSI-300: ASTM A105 ON FLANGE 3 PAIR 06: 15NB: SS316: SCH.80 250mm Long NIL
PROCESS DATA	FLUID* FLOW (T/HR) PRESSURE (KG/CM² (A)) TEMPERATURE (DEG. C.) MAX. ALLOWABLE PRESS LOSS DESIGN PRESS : TEMP DIFF. PRESS AT MAX FLOW	[■] CONDENSATE / [■] DMCW / [■] CW / [■] ACW / [■] RAW WATER MAXIMUM NORMAL MINIMUM SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT
PIPE LINE DATA	PIPE SIZE (OD X THK) mm PIPE MATERIAL* BORE DIAMETER MIN. AVAILABLE STRAIGHT LENGTH UPSTREAM:DOWNSTREAM FLOW DIRECTION*	AS PER PRICE SCHEDULE [III] SA106GR.B / [III] SA106GR.C / [IIII] CS AS PER IS 2062 GR.B / [IIIII] CS AS PER IS 1239 BIDDER TO FURNISH DURING PROJECT 15D 10D: 5D [IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
OTHER DATA	APPROX. WEIGHT OF ASSEMBLY COMMISIONING SPARE	BIDDER TO FURNISH DURING PROJECT ONE PAIR OF GASKET FOR EACH ORIFICE ASSEMBLY
PACKING	AS PER ATTACHED PACKING SPECIFICATION ELS	SEWHERE

^{\$} S-bent to be provided for vertical flow direction

BIDDER TO QUOTE IN COLUMN "A" OF PRICE FORMAT FOR DETAILS SPECIFIED ABOVE BIDDER TO NOTE THE FOLLOWING FOR EACH ORIFICE ASSEMBLY:

A) In case additional pair of tappings is required, extra 2 no's nipples per pair of tappings shall be supplied by the bidder. Additional price for the same shall be as per unit price quoted in the price schedule under column D.

The above shall be informed by BHEL during project specific ordering

^{*} Project specific data shall be informed by BHEL during project ordering

[#] Carrier ring design shall be provided (if required in a specific project) for line size <=2 inches



SPECIFICATION NO.: PE-TS-20-145-I105A

00

REV. NO.

DATE: 20 JULY'2024

Tag No. : ORIFICE ASSEMBLY AS PER TYPE "B" OF THE PRICE FORMAT

Date Sheet No. 2

	DATA	A SHEET – A
ELEMENT	SERVICE MAKE: MODEL TYPE STANDARD* DESIGN# MATERIAL BETA RATIO BORE DIAMETER VENT HOLE DRAIN HOLE	SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT [IN] BS-1042 / [IN] ISO 5167 CONCENTRIC SQUARE EDGE SS316/SS316L 0.4 to 0.7 BIDDER TO FURNISH DURING PROJECT YES NO
END CONNECTION	TYPE FLANGE TYPE FLANGE RATING: MATERIAL TAPPING LOCATION NUMBER OF TAPPINGS NIPPLE: QTY: SIZE: MATERIAL: RATING ROOT VALVE QTY.	[■] FLANGED, [■]BUTT WELD END WELDNECK ANSI-300: ASTM A182 F304/SS316/SS316L ON FLANGE 3 PAIR 06: 15NB: SS316/SS316L: SCH.80 250mm Long NIL
PROCESS DATA	FLUID* FLOW (T/HR) PRESSURE (KG/CM² (A)) TEMPERATURE (DEG. C.) MAX. ALLOWABLE PRESS LOSS DESIGN PRESS: TEMP DIFF. PRESS AT MAX FLOW	[■] CONDENSATE / [■] DMCW / [■] CW / [■] ACW / [■] DMW MAXIMUM NORMAL MINIMUM SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT
PIPE LINE DATA	PIPE SIZE (OD X THK) mm PIPE MATERIAL BORE DIAMETER MIN. AVAILABLE STRAIGHT LENGTH UPSTREAM:DOWNSTREAM FLOW DIRECTION*	AS PER PRICE SCHEDULE SA312TP304/SS316/SS316L BIDDER TO FURNISH DURING PROJECT 15D 10D:5D [III]HORIZONTAL / [III]VERTICAL
OTHER DATA	APPROX. WEIGHT OF ASSEMBLY COMMISIONING SPARE	BIDDER TO FURNISH DURING PROJECT ONE PAIR OF GASKET FOR EACH ORIFICE ASSEMBLY

^{\$} S-bent to be provided for vertical flow direction

BIDDER TO QUOTE IN COLUMN "B" OF PRICE FORMAT FOR DETAILS SPECIFIED ABOVE BIDDER TO NOTE THE FOLLOWING FOR EACH ORIFICE ASSEMBLY:

A) In case additional pair of tappings is required, extra 2 no's nipples per pair of tappings shall be supplied by the bidder. Additional price for the same shall be as per unit price quoted in the price schedule under column D.

The above shall be informed by BHEL during project specific ordering

^{*} Project specific data shall be informed by BHEL during project ordering

[#] Carrier ring design shall be provided (if required in a specific project) for line size <= 2 inches



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TECHNICAL DATA SHEET - B (SUPPLIER DATA TO BE FURNISHED AFTER AWARD OF CONTRACT FOR EACH TAG)

SL.NO	DESCRIPTION	DETAILS
1.0	MAKE: MODEL TYPE	
2.0	BETA RATIO	
3.0	BORE DIAMETER OF ELEMENT	
4.0	DIFFERENTIAL. PRESSURE AT SCALE FLOW	
5.0	PERMANENT PRESSURE LOSS AT MAX FLOW	
6.0	APPROX. WEIGHT OF ASSEMBLY	



MANUFACTURER / BIDDER / SUPPLIER NAME & ADDRESS

STANDARD QUALITY	PLAN	SPEC. NO:	DATE:
CUSTOMER:		QP NO.: PE-QP-999-145-H024, Rev No.:00	DATE: 04.01.2024
PROJECT:		PO NO.:	DATE:
ITEM: FLOW ORIFICE	SYSTEM: S&CE		SHEET 1 OF 2

SNo.	Component & Operations	Characteristics	Class	Type of Check	Quantum	of check	Reference document	Acceptance norms	Format of rec	ord	Agency			Remarks				
1.0	2	3	4	5	6		6		6		6 7		9	*		**		10
1.0	2	3	4	5	М	B/C		8	9	D	М	В	С	10				
1.01	MATERIAL																	
	Orifice Plate	Physical, Chemical properties	MA	Physical, Chemical tests	1/Heat		Approved Drg / Data Sheet	Approved Drg / data Sheet	Mil Test Certificate*	1	Р	V	-	* In case correlated TC is not available, testing in NABL lab shall be carried out.				
1.02	FLANGES																	
а	Forgings	Chemical, Mech Properties, & Heat Treatment	MA	Chemical, Mech Properties, & Heat Treatment	100%		ASME B16.36 ASME B16.47	ASME B16.36 ASME B16.47	MTC Cert, HT certificate*	1	Р	V	ı	\$ In case thickness is more				
		UT	MA	UT test \$	100%		Material Spec as per ASTM A 388	Material Spec as per ASTM A 388	UT Certificate	1	Р	v	-	than 40 mm				
b	Machining	Dimensions	MA	Measurement	100%		Approved Drg / Data Sheet	Approved Drg / Data Sheet	Inspection Reports	٧	Р	V	-					
2.0	IN PROCESS																	
	Machining of orifice	Dimension	MA	Measurement	100%		Approved Drg / Data Sheet	Approved Drg / data Sheet	Inspection Reports	1	Р	V	-					
		Surface finish	MA	Measurement	100%		Approved Drg / Data Sheet	AGA-3 / ISO5167-2	Inspection Reports	1	Р	V	-	Surface roughness Tester				
		Surface flaw on machined surface for Orifice Plate	MA	Di-Penetrant test	100%		ASTM 165 / IS:3658	ASTM 165 / IS:3658	Inspection Reports / Test Certificate	1	Р	v	-					
3.0	ASSEMBLY and FINAL INSPECTION																	
		Overall dimensions	MA	Measurement	100%	100%	Approved Drg / Data Sheet	Approved Drg / data Sheet	Inspection Reports	٧	Р	w	-	All test reports & dimension reports shall be verified by BHEL at the time of Final Inspection.				
		Marking, Tag no. Direction of flow	MA	Visual	100%	100%	Approved Drg / Data Sheet	Approved Drg / data Sheet	Inspection Reports	٧	P,	W	-	Positive material identification testing shall be performed by vendor and the same shall be witnessed by BHEL.				

	BHEL						BIDDER/ SUPPLIER FOR CUSTOMER REVIEW & APP			& APPROVAL	
	ENGINEERING		QUALITY			Sign & Date		Doc No:	Ooc No:		
	Name	Sign & Date		Name	Sign & Date	Seal			Name	Sign & Date	Seal
Prepared By:	NEHA JAIN	Neha	Prepared By:	KUSUM GAUTAM	Kusum Digitally signed by Kasum Gautam Did Generalized Gasonic on HHELL (2014) Professional Control on HHELL (2014) Profes			Reviewed by:			
Reviewed By:	S.C.SHARMA	Suresh Chand Sharma Sharma	Reviewed By:		Gautam Danie 202401.23 003817 + 05397			Approved			
Approved By:	GIRISH BHAGCHANDANI	Girish Input to the Control of the C	Approved By:	HARISH KUMAR	Harish Kumar Contain squad to Head Numer Contains Contain			by:			



MANUFACTURER / BIDDER / SUPPLIER NAME & ADDRESS

STANDARD QUALITY	PLAN	SPEC. NO:	DATE:
CUSTOMER:		QP NO.: PE-QP-999-145-H024, Rev No.:00	DATE: 04.01.2024
PROJECT:		PO NO.:	DATE:
ITEM: FLOW ORIFICE	SYSTEM: S&CE		SHEET 2 OF 2

		Calibration	MA	Performance test	One per type		Approved Data Sheet	Approved Data Sheet	Test Certificate	1	w	V	-	CALIBRATION Test to be carried out at IIT-/ FCRI or NABL approved laboratory.
4.0	PAINTING	Shade & finish	MA	Measurement	100%		BHEL Tech Spec	BHEL Tech Spec	Inspection Reports	1	Р	V	-	DFT check
5.0	PACKING	Soundness of Packing	MA	Visual	100%	100%	Tech. Spec	Tech. Spec		1	Р	٧	-	

LEGENDS:

*RECORDS, INDENTIFIED WITH "TICK"($\sqrt{}$) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION, **D**: DOCUMENTATION

** M: SUPPLIER/ MANUFACTURER/ SUB-SUPPLIER/SUB-CONTRACTOR, B: BHEL/ BHEL NOMINATED THIRD PARTY INSPECTION AGENCY, C: CUSTOMER,

P: PERFORM, W: WITNESS, V: VERIFICATION, MA: MAJOR, MI: MINOR, CR: CRITICAL.

	BHEL						BIDDER/ SUPPLIER FOR CUSTOMER REVIEW & APPRO			& APPROVAL	
	ENGINEERING			QUALITY				Doc No:	Ooc No:		
	Name	Sign & Date		Name	Sign & Date	Seal			Name	Sign & Date	Seal
Prepared By:	NEHA JAIN	Neha	Prepared By:	KUSUM GAUTAM	Kusum Digitally signed by Kassum			Reviewed by:			
Reviewed By:	S.C.SHARMA	Suresh Chand Deputy agend by Suresh Chand Star Borre and Star Borr	Reviewed By:		Kusum Day and by Sanure Gate District Castern on HEL, or all Massure parties of hell, or all M			Approved			
Approved By:	GIRISH BHAGCHANDANI	Girish Capada yapan barah magananan a-dala. Bhagchandani apan ana a-dala.	Approved By:	HARISH KUMAR	Harish Kumar Department of the Constant Service (September Service Constant Service Constan			by:			



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Date : 20 .IUI Y'24	

PAINTING REQUIREMENT

Package	Surface Preparation	Primer Coat	No. of Coats	i i)⊢i/in	Intermedia te Coat (in Microns)	NO OT	DFT (in Microns)	Final Coat	No. of Coats	DFT (in Microns)	Total DFT	Remarks
Flow ORIFICE	Shot blasting/ abrasive blasting	Red Oxide Zinc Phosphate primer (Alkyd base) to IS 12744	2	25	NA	NA	NA	NA	NA	NA	50	Stainless Steel, Non- Ferrous and Galvanised item/portion will not be painted.



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PACKING REQUIREMENT - Minimum requirement of packing specified herewith, any superior packing can also be acceptable

Sl.no	DESCRIPTION
1	Type of Packing:
1.1	Item shall be fully covered with multi layered cross laminated colourless polyethylene sheet of at least 100 GSM and shall be packed inside wooden box or crate or fixed on wooden pallet depending upon the size.
1.2	Item shall be firmly fixed to the bottom of the packing box/crate/pallet with the help of supports/blocks to arrest the movement from all sides.
1.3	Loose items/accessories like nipples etc. shall be separately packed with polyethylene sheet of at least 100 GSM inside the packing box/crate.
1.4	Marking for Fragile & Condensing environment shall be done on the packing box.
2	Quality of wood:
2.1	Quality of wood: Wood used for packing box shall be Pinewood, Rubber wood, Mango wood, Fir wood, Silver Oak wood or other as per availability with moisture content not exceeding 30%.
3	Cushioning material and moisture absorber:
3.1	Suitable cushioning shall be provided by rubberized coir/ expanded soft polyethylene foam.
3.2	Adequate quantity of packed desiccant shall be suitably placed inside the packing box.
4	Packing slip & holder:
4.1	Packing slip kept in polyethylene bag shall be placed inside the wooden box at appropriate place.
4.2	One copy of packing slip wrapped in polyethylene bag covered in galvanized iron tin sheet/ aluminium packing slip holder shall be fixed on the external surface the packing box.

	CONSOLIDATED BOQ FOR RATE CONTRACT OF FLOW ORIFICE 2024-25						
	SL NO DESCRIPTION Complete Orifice assembly with pipe line material of SA106GRB / SA1 GR B /CARBON STEEL ERW,IS:1239 and flange material of AS					С	D
SL NO						PAIR OF GASKET	NIPPLE 15Nb , SS316 , SS316L 250mm long
	•	A1	A4	B1	B4	C1	D1
		SCHEDULE OF PRICES for Complete Orifice assembly with Three (3) pairs of tapping, accessories like pair of gasket, Pressure take-off points, Nipples etc and commisioning spare of 1 no. pair of gasket for each assembly	CALIBRATION CHARGES for Complete Orifice assembly (Ex- Works)	SCHEDULE OF PRICES for Complete Orifice assembly with Three (3) pairs of tapping, accessories like pair of gasket, Pressure take-off points, Nipples etc and commissioning spare of 1 no. pair of gasket for each assembly	CALIBRATION CHARGES for Complete Orifice assembly (Ex- Works)	based on prequirement applicable fo	ms to be included project specific is (Item shall be in any line size as in column A or B)
	PIPE SIZE	QTY	No.	QTY	No.	QTY	QTY
1	40" (1000 NB)	8	4				
2	36" (900 NB)	7	5			i	
3	32" (800 NB)	23	13				
4	28" (700 NB)	29	19		0		
5	24" (600 NB)	12	7	0			
6	20" (500 NB)	26	14]			
7	18" (450 NB)	28	16				
8	16" (400 NB)	12	8			10	10
9	14" (350 NB)	18	13				
10	12" (300 NB)	89	29				
11	10" (250 NB)	14	11	2	1		
12	8" (200 NB)	15	13	16	7		
13	6" (150 NB)	7	6	9	5		
14	4" (100 NB)	1	1	5	3		
15	< 4" (<100 NB)	1	1 1	1	1		



PE-TS-20-145-H105A Rev. No. 00 Date: 20 JULY'24

BOQ - SPARES

LIST OF COMMISSIONING SPARES				
Sr. No.	Sr. No. Description Qty FOR STATION			
	Pair of Gaskets	One (1) set with each Flow Orifice		
1		Assembly		



PE-TS-20-145-H105A Rev. No. 00 Date: 20 JULY'24

DOCUMENTATION REQUIREMENT

DRAWINGS & DOCUMENTS TO BE SUBMITTED BY ALL THE BIDDERS ALONG WITH THE BID			
SI. No.	DOCUMENT TITLE		
1	PQR CREDENTIALS		
2	COMPLIANCE SHEET		

DRAWINGS & DOCUMENTS TO BE SUBMITTED BY SUCCESSFUL BIDDER AFTER AWARD OF CONTRACT ALONG WITH SUBMISSION SCHEDULE			
SI. No.	DOCUMENT TITLE	FIRST SUBMISSION SCHEDULE	
1	DATASHEET	With 10 days from PO	
2	GA DRAWING WITH EDGE PREPARATION	With 10 days from PO	
3	DESIGN CALCULATION	With 10 days from PO	
4	DP Vs FLOW CURVE	With 10 days from PO	
5	QUALITY PLAN DULY SIGNED & STAMPED	With 10 days from PO	
6	CALIBRATION CERTIFICATE	Test Report to be submitted prior to final inspection	

BHEL/Customer comments/approval and Vendor Resubmission schedule			
BHEL on First revision	Within 10 days of Vendor submission/Resubmission		
BHEL /Customer Comment/Approval on subsequent revision	Within 18 days of Vendor submission/Resubmission		
Vendor Resubmission	Within 7 days of BHEL/ Customer Comments.		

DRAWINGS & DOCUMENTS TO BE SUBMITTED AS FINAL/AS-BUILT DOCUMENT				
SI. No.	DOCUMENT TITLE	SUBMISSION SCHEDULE		
1	APPROVED DOCUMENTS			
2	CALIBRATION CERTIFICATE	Along with dianatah		
3	O&M MANUAL	Along with dispatch		
4	ALL TEST CERTIFICATES			



PE-TS-20-145-H105A

Rev. No. 00

Date: 20 JULY'24

COMPLIANCE CERTIFICATE				
1	It is hereby confirmed that the technical specification (sheet 1 to 20) has been read and understood. We confirm compliance to the tender specification including any prebid clarification and amendments issued prior to techno-commercial bid opening without any deviation.			
2	It is hereby declared that any technical submittals which was not specifically asked by BHEL in NIT shall not to be considered as part of bid and shall not be evaluated by BHEL.			

Signature of authorised Representative
Name and Designation :
Name & Address of the Bidder
Date

PRE-QUALIFICATION REQUIREMENT



FLOW ORIFICE ASSEMBLY

 PE-PQ-999-145-H003

 DATE
 20.07.2024

 REV NO
 00

(RATE CONTRACT)

1.0	Bidder should be Original equipment manufacturer (OEM) for FLOW ORIFICE. In case bidder is not the OEM, evaluation shall be done as following:- (i) If bidder happens to be an Indian subsidiary of foreign OEM, then credentials of foreign OEM can be considered for meeting the PQR. (ii) If bidder happens to be authorised channel partner or has a valid collaboration agreement/licensing agreement with some other company or being a Joint Venture company, then the credentials of collaborator/licensing company/Principal company/JV partner can also be considered for meeting PQR as per the scope of work. The scope matrix shall include their respective roles including design vetting, manufacturing of critical component and warranty/ guarantee. If bidder qualifies on the basis of credentials of their principal/ JV partner/ Collaborator etc., then the principal/ JV partner/ Collaborator shall be responsible for overall design vetting and warranty/ guarantee of the package.
2.0	The Product being offered by the bidder should be in use successfully in power plant or any other industrial application for at least 1 (One) year. Bidder to submit either of following supporting documents for the product (flow orifice):-
	Copy of minimum 1 (One) Performance Certificate from end user / Customer certifying that product is running successfully for 1 (One) year from date of commissioning. The certificate should clearly indicate date of commissioning, date of issue of certificate and name/designation of the certificate issuer. Copy of purchase order & technical parameters to be attached along with the performance certificate.
	OR
	Copy of repeat orders from minimum 2 (Two) different purchasers. Order received by supplier from same purchaser with a gap of minimum 2 (Two) years shall be considered as repeat order. Copy of technical parameters for each order to be attached.
0.0	Biddent femile considered for first female in F. C.
3.0	Bidder to furnish experience list of last 5 years indicating customer name, purchase order reference, item supplied & year of supply to establish the continuity of business.
4.0	Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.

PREPARED BY	REVIEWED BY	APPROVED BY
NAME	NAME	NAME
DESIGNATION	DESIGNATION	DESIGNATION

ESCRIPTION	Complet	te Orifice assem /CAI	bly with pipe lin IBON STEEL ER	e material of SA W,IS:1239 and f (Ex-Work	lange mater	A106GRC / (ial of ASTM /	CS AS PER IS 2 A 105	2062 GR B	SI No.	DESCRIPTION	Complete Or	ifice assembly with	pipe line material A 182 F304	of SA312TP304/5 SS316/SS316L (SS304/SS31 (Ex-Works)	16/SS316L ar	nd flange mate	erial of ASTM														
					B4 Co	C1 61 CALIBRATION CHARGES for Additional items to be included based on project specific requirements (item shall be applicable for any line size as mer in column A or 8) Additional items to be included based on project specific requirements (item shall be applicable for any line size as mer in column A or 8)						ze as mentioned																				
PIPE SIZE	QTY	% Allocation	UNIT PRICE (EX WORKS)	TOTAL PRICE (EX WORKS)	No.	% Allocation	UNIT PRICE (EX WORKS)	TOTAL PRICE (EX WORKS)	SI No.	PIPE SIZE	QTY	% Allocation	UNIT PRICE (EX WORKS)	TOTAL PRICE (EX WORKS)	No. Alk	% UN	NIT PRICE X WORKS)	TOTAL PRICE (EX WORKS)	PAIR OF GASKET %	ii Allocation	UNIT PRICE EX WORKS)	TOTAL PRICE (EX WORKS)	NPPLE 15Nb , SS316 , SS316L 250mm long	% Allocation	UNIT PRICE (EX WORKS)	TOTAL PRICE (EX WORKS)	GRAND TOTAL EX- WORKS PRICE (DULY PACKED) (INR)	FREIGHT CHARGES WITHOUT GST @ % OF TOTAL EX- WORKS	FREIGHT CHARGES WITHOUT G (INR)	APPLICABLE GST RATE % ON (TOTAL EX WORKS + FREIGHT)	GST (INR)	TOTAL F.O.R. S (INR)
0" (1000 NB)		0.09115	#VALUE!	#VALUE!	4	0.02173	#VALUE!	#VALUE!																			#VALUE!		#VALUE!		#VALUE!	mv.
36" (900 NB)	7	0.06460	#VALUE!	#VALUE!	5	0.02200	#VALUE!	#VALUE!																			#VALUE!		#VALUE!		#VALUE!	EV.F
r(800 NB)	23	0.16772	#VALUE!	#VALUE	13	0.04520	#VALUE!	\$VALUE																					#VALUE!			av.
(700 NB)	29	0.11663	#VALUE!	#VALUE	19	0.06249	#VALUE!	#VALUE!																			#VALUE!				#VALUEI	
(600 NB)	12	0.04781	#VALUE!	SVALUE	7	0.01340	#VALUE!	\$VALUE																			#VALUE!	1	#VALUE!		#VALUE!	, and
(500 NB)	26	0.06890	#VALUE!	#VALUE	14	0.00369	#VALUE!	#VALUE!																			#VALUEI		#VALUE!		#VALUE!	
(450 NB)	28	0.06010	#VALUE!	#VALUE!	16	0.00342	#VALUE!	#VALUE!																			#VALUE!		#VALUE!		#VALUE!	
(400 NB)	12	0.02035	#VALUE!	#VALUE!	8	0.00135	#VALUE!	#VALUE!											10.00000	0.00091	#VALUE!	#VALUE!	10.00000	0.00011	#VALUE!	#VALUE!	#VALUE!	to be quoted	#VALUE!	to be quoted	#VALUE!	
(350 NB)	18	0.02503	#VALUE!	#VALUE!	13	0.00245	#VALUE!	#VALUE!																			WALUEI		WVALUEI		#VALUE!	r
(300 NB)	89	0.09255	#VALUE!	#VALUE!	29	0.00473	#VALUE!	#VALUE!																			#VALUE!		#VALUE!		#VALUE!	· ·
(250 NB)	14	0.00960	#VALUE!	#VALUE!	11	0.00163	#VALUE!	#VALUE!		10" (250 NB)	2.00000	0.00459	#VALUE!	#VALUE!		.00018 #	IVALUE!	#VALUE!									#VALUEI		#VALUE!		#VALUE!	
(200 NB)																											#VALUE!		#VALUEI		#VALUE!	
	15	0.00708	#VALUE!	#VALUE!	13	0.00147	#VALUE!	#VALUE!	2	8" (200 NB)	16.00000	0.02351	#VALUE!	#VALUE!			EVALUE!	#VALUE!									#VALUEI		#VALUE!		#VALUE!	, n
150 NB)	7	0.00238	#VALUE!	#VALUE!	6	0.00045	#VALUE!	#VALUE!	3	6" (150 NB)	9.00000	0.00744	#VALUE!	₽VALUE!	5 0.	00032 #	EVALUE!	#VALUE!									#VALUE!	-	#VALUE!		#VALUE!	
"(100 NB)	1	0.00015	#VALUE!	#VALUE!	1	0.00003	#VALUE!	#VALUE!	4	4" (100 NB)	5.00000	0.00292	#VALUE!	#VALUE!	3 0	.00017 #	EVALUE!	#VALUE!									#VALUE!		#VALUE!		#VALUE!	n
*(<100 NB)	1	0.00015	#VALUE!	#VALUE!	1	0.00003	#VALUE!	#VALUE!	5	< 4" (<100 NB)	1.00000	0.00070	#VALUE!	#VALUE!	1 0	00006 #	EVALUE!	#VALUE!									#VALUE!		#VALUE!		#VALUE!	an an
												Grand	I Total (INR)														x		#VALUE!	0	#VALUE!	r
Grand Total (INR)to be quoted in words												Grand Total (INR)	- to be quoted i	n words																		

	COST OF WITHDRAWAL											
PROJECT:-						Framework Agreement (Rate Contract)						
PACKAGE	:-				FLOW ELEMENT- ORIFICE							
TENDER E	IQUIRY :-											
NAME OF	THE BIDDER											
SI. No.	Volume/Section	Page No.	Clause No.	Technical Specification/Tender Document No	Complete Description of Deviation	Cost of withdrawal of deviation to be entered by the bidder in	Reference of price Schedule of which Cost of Withdrawal of Deviation is applicable	Nature of cost of withdrawal of deviation (Positive/Negati ve)	Reasons for quoting deviation			
1	TECHNICAL DEVIATION											
1.01												
1.02												
1.03												
1.04												
1.05												
	COMMERCIAL DEVIATION											
2.01												
2.02												
2.03												
2.04												
2.05												

NOTES:

- 1. Cost of Withdrawal of deviation will be applicable on the basic price (i.e. excluding taxes, duties & freight) only.
- 2. All the bidders have to list out all their technical & commercial deviations (if any) in details in the above format.
- 3.Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.
- 4.Bidder shall submit duly filled unpriced copy of above format indicating "quoted" in "cost of withdrawl of deviation" column of the schedule above along with their Techno-commercial offer, wherever applicable. In absence of same, such deviation(s) shall not be considered and offer shall be considered in total compliance to NIT.
- 5. Bidder shall furnish price copy of above format along with price bid.
- 6. The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at discretion of the Purchaser.
- 7.Bidders to note that any deviation (technical/commercial) not listed in above and asked after Part-I opening shall not be considered.
- 8. For deviations w.r.t. Credit Period, Liquidated damages, Firm prices if a bidder chooses not to give any cost of withdrawl of deviation loading as per Annexure-VII of GCC, Rev-07 will apply. For any other deviation mentioned in unpriced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawl of deviation shall be taken as NIL.
- 9. Any deviation mentioned in priced copy of this format, but not mentioned in the un-priced copy, shall not be accepted.
- 10. All techno-commercial terms and conditions of NIT shall be deemed to have been accepted by the bidder, other than those listed in unpriced copy of this format.
- 11. Cost of withdrawl is to be given seperately for each deviation. In no event bidder should club cost of withdrawl of more than one deviation else cost of withdrawl of such deviations which have been clubbed together shall be considered as NIL.
- 12. In case nature of cost of withdrawl (positive/negative) is not specified it shall be assumed as positive.
- 13. In case of descrepancy in the nature of impact (positive/ negative), positive will be considered for evaluation and negative for ordering.

<u>Tentative List of projects considered for FrameWork Agreement (rate Contract) of Flow Element-Orifice</u>

- 1) NTPC Lara (2X800 MW)
- 2) NTPC Singrauli (2X800 MW)
- 3) NLC Talabira (3X800 MW)
- 4) HPCGCL Yamunanagr (1X800 MW)
- 5) NTPC SIPAT (1 x 800 MW)
- 6) SCCL (1 x 800 MW)
- 7) Raghunathpur-TG (2X660 MW)
- 8) MEL Mahaan(Stage-II) (2X800 MW)
- 9) Adani Raipur (2X800 MW)
- 10) 2x800MW DVC Koderma



BHEL / PEM / CMM SPECIAL CONDITIONS OF CONTRACT OF FRAMEWORK AGREEMNT (RATE CONTRACT)

SPECIAL CONDITIONS OF CONTRACT OF FRAMEWORK AGREEMENT (RATE CONTRACT) FOR FLOW ELEMENT - ORIFICE

- BHEL/PEM intends to enter into Framework Agreement (Rate Contract) for FLOW ELEMENT ORIFICE package.
 Framework Agreement (Rate Contract) validity for ordering shall be two years from the purchase order for Rate
 Contract.
- 2. BHEL-PEM will place purchase order for Framework Agreement (Rate Contract) only on suppliers who are registered with BHEL-PEM. Bidders who are not registered with BHEL-PEM needs to apply & get registered for subject package with PEM before Reverse Auction & hence they need to apply online for registration on PEM web portal & have to enclose acknowledgement with the bid documents else their bid may not be considered for evaluation.

The bidders who are not registered with BHEL-PEM may apply for registration in BHEL-PEM through Registration Portal available at www.pem.bhel.com -->vendor section-->online supplier registration. All credentials and/ or documents duly signed & stamped related to registration has to be uploaded on the website & submit the application for registration. One set of hard copy filled-up SRF downloaded from Online Registration Portal duly signed & stamped has to be submitted.

- 3. Framework Agreement (Rate contract) is proposed to be done with 2 suppliers in ratio of 70:30 value wise at L1 FOR site price (Ex-works + freight) for this package. However, order for a project shall not be split.
- 4. Quantity variation shall be applicable as +/- 30 % of the contract value. Bidders shall be informed that the quantities indicated in the tender are tentative quantities. No minimum quantity is guaranteed by BHEL.
- 5. This tender is issued by BHEL PEM for Framework Agreement (Rate Contract) of FLOW ELEMENT ORIFICE required at various BHEL project sites. All bidders will be informed the following: —
- a) As and when requirement arises, the concerned Project Groups of BHEL-PEM will place order directly on the supplier against the Framework Agreement (Rate Contract).
- b) The drawings/ documents submission & approval, submission of Performance Security/ Performance Bank Guarantee, submission of invoices, processing and release of payment after supply of material shall be dealt as per Framework Agreement (Rate Contract) contract terms and shall be directly done with Project Groups which has placed purchase order noted at sl. no. (a) above.
- 6. Details of consignee and project site information for dispatch of material shall be intimated at the time of placement of PO for specific project after finalization of RC.
- 7. The items will be required against respective projects. Exact quantities and Project information shall be intimated while placing order for a specific project based on the Rate Contract.
- 8. The prices shall be FIRM during the period of two years with a provision for further extension after review on mutual consent
- 9. Inspection of materials shall be carried out by BHEL/ CQA and or by Customer or by an Authorized Agency at manufacture's works before dispatch, if required. Dispatch of material to be done, only after receipt of BHEL/ Customer MDCC. It is responsibility of vendor to obtain Material Dispatch Clearance Certificate (MDCC) from BHEL or Customer as required before dispatch of material.

Vendor shall give inspection call on BHEL-CQS web site to applicable inspection agency with a copy of inspection call to BHEL-PEM for arranging Customer participation (if applicable) in inspection / Joint inspection on the proposed date with an advance notice of 15 working days. Inspection charges shall be paid by BHEL-PEM.



BHEL / PEM / CMM SPECIAL CONDITIONS OF CONTRACT OF FRAMEWORK AGREEMNT (RATE CONTRACT)

Items have to be manufactured as per specification and supplied strictly in accordance with the approved BHEL/ Customer's Drawings & Quality Plan. The items/ test certificate of items, which for any reason are not acceptable to BHEL/ Customer, shall be required to be retested. No extra charge shall be payable on those account by BHEL.

- 10. Other terms and conditions shall be as per Standard Technical specification no. PE-TS-20-145-H105A REV No. 00, GCC Rev 07, Corrigenda 01 to GCC Rev 07 and Enquiry letter.
- 11. This Enquiry is subject to Conditions/ limits if any imposed in PMD/ Vendor registration.
- 12. Tentative quantity is given in Enquiry.
- 13. Bidders to submit offer for RC of said items ONLINE via BHEL-GePNIC Portal only. Bidders to upload tender documents complete in all respects duly signed & stamped on each and every page by the authorized signatory of the bidder as a token of acceptance of all the terms and conditions of tender.
- 14. The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendor/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL web site http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud as soon as it comes to their notice.

Make In India certification

Letter nead of Company/Cost A	uditor/Statutory Auditor
Ref.	Date
To, Bharat Heavy Electricals Limite PEM, PPEI Building, Plot No 2 Sector -16A, Noida (U.P)-20130	5,
Subject: - Certification regardin	g Local Content
Reference: Enquiry No.	
Name of Package: FRAMEWOI ELEMENT- ORIFICE	RK AGREEMENT (RATE CONTRACT) OF FLOW
(RATE CONTRACT) OF FLOURING With NIT and Public Processing	offered by us of "FRAMEWORK AGREEMENT W ELEMENT- ORIFICE" meets the requirement in urement (Preference to Make in India), Order 2017 & 29.05.2019, 04.06.20 & 16.09.20, 19.07.2024 and
Local Content:%	
We further confirm that details done at our works located at	of location at which the local value addition will be
(complete address of the wo	orks)
Yours truly (autho	orized signatory of company)
(aund	

Land Border Certificate

Dated:	
Tender Title:	
This has reference to order no. F.No.7/10/2021-PPD, Ministry of F Public Procurement Division. We, M/s the following:	
I have read the clause regarding restrictions on procurement from land border with India and on sub-contracting to contractors from M/s is n	such countries; I certify that this
I hereby certify that this M/s requirements in this regard and is eligible to be considered.	fulfills all

Signature with Company seal

Annexure-1

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and
, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART
<u>Preamble</u>
The Principal intends to award, under laid-down organizational procedures, contract/s for
(hereinafter referred to as "Contract"). The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint panel of Independent External Monitor(s) (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
- 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- 1.1.3 The Principal will exclude from the process all known prejudiced persons.
 - 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. The Bidder(s)/ Contractor(s) commits himself to observe the following principles during participation in the tender process and during the contract execution.

- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
 - 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
 - 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and shall await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process, terminate the contract, if already awarded, exclude from future business dealings and/ or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder (s) from the tender process before award / order acceptance according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal is entitled to terminate the Contract according to Section 3, or terminates the Contract in application of Section 3 above , the Bidder(s)/ Cotractor (s) transgression through a violation of Section 2 above shall be construed breach of contract and the Principal shall be-entitled to demand and recover from the Contractor an amount equal to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee , whichever is higher, as damages, in addition to and without prejudice to its right to demand and recover compensation for any other loss or damages specified elsewhere in the contract.

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 (three) years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason or action can be taken as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 6 - Equal treatment of all Bidder (s)/ Contractor (s) / Sub-contractor (s)

- 6.1 The Principal will enter into Integrity Pacts with identical conditions as this Integrity Pact with all Bidders and Contractors.
- 6.2 In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor(s) and ensure that all Sub-contractors also sign the Integrity Pact.
- 6.3 The Principal will disqualify from the tender process all Bidders who do not sign this Integrity Pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 -Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible panel of Independent External Monitor (s) (IEMs) for this Integrity Pact. The task of the IEMs is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Integrity Pact.
- 8.2 The IEMs are not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The IEMs shall be provided access to all documents/ records pertaining to the Contract, for which a complaint or issue is raised before them as and when warranted. However, the documents/records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.
- 8.4 The Principal will provide to the IEMs sufficient information about all meetings among the parties related to the Contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the IEMs the option to participate in such meetings.

- 8.5 The advisory role of IEMs is envisaged as that of a friend, philosopher and guide. The advice of IEMs would not be legally binding and it is restricted to resolving issues raised by a Bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some Bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of Contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to the CMD, BHEL at the earliest. They may also send their report directly to the CVO, in case of suspicion of serious irregularities requiring legal/ administrative action. Only in case of very serious issue having a specific, verifiable Vigilance angle, the matter should be reported directly to the Commission. IEMs will tender their advice on the complaints within 30 days.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the IEMs and its terms and conditions.
- 8.9 IEMs should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the Principal should be looked into by the CVO of the Principal.
- 8.10 If the IEMs have reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code / Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEMs may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 After award of work, the IEMs shall look into any issue relating to execution of Contract, if specifically raised before them. As an illustrative example, if a Contractor who has been awarded the Contract, during the execution of Contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs. Issues like warranty/ guarantee etc. shall be outside the purview of IEMs.
- 8.12 However, the IEMs may suggest systemic improvements to the management of the Principal, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.
- 8.13 The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

- 9.1 This Integrity Pact shall be operative from the date this Integrity Pact is signed by both the parties till the final completion of contract for successful Bidder, and for all other Bidders 6 months after the Contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.
- 9.2 If any claim is made/ lodged during currency of this Integrity Pact, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

- 10.1 This Integrity Pact is subject to Indian Laws and exclusive jurisdiction shall be of the competent Courts as indicated in the Tender or Contract, as the case may be.
- 10.2 Changes and supplements as well as termination notices need to be made in writing.
- 10.3 If the Bidder(s)/ Contractor(s) is a partnership or a consortium or a joint venture, this Integrity Pact shall be signed by all partners of the partnership or joint venture or all consortium members.
- 10.4 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- Only those bidders / contractors who have entered into this Integrity Pact with the Principal would be competent to participate in the bidding. In other words, entering into this Integrity Pact would be a preliminary qualification.
- In the event of any dispute between the Principal and Bidder(s)/ Contractor(s) relating to the Contract, in case, both the parties are agreeable, they may try to settle dispute through Mediation before the panel of IEMs in a time bound manner. In case, the dispute remains unresolved even after mediation by the panel of IEMs, either party may take further action as the terms & conditions of the Contract. The fees/expenses on dispute resolution through mediation shall be shared by both the parties. Further, the mediation proceedings shall be confidential in nature and the parties shall keep confidential all matters relating to the mediation proceedings including any settlement agreement arrived at between the parties as outcome of mediation. Any views expressed, suggestions, admissions or proposals etc. made by either party in the course of mediation shall not be relied upon or introduced as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the dispute that is the subject of mediation proceedings. Neither of the parties shall present IEMs as witness in any Alternative Dispute Resolution or judicial proceedings in respect of the dispute that was subject of mediation.

For & On behalf of the Principal (Office Seal)	For & On behalf of the Bidder/ Contracto (Office Seal)
Place Date	
Witness:(Name & Address)	Witness: (Name & Address)

Clause on IP in the tender

Integrity Pact (IP)

(a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

SI	IEM	Email
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in
2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in
3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in

- (b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.
- (c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

Note:

No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc on the tender issued. All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below:

Details of contact person(s):

(1)	(2)
Name:	Name:
Deptt:	Deptt:
Address:	Address:
Phone: (Landline/ Mobile)	Phone: (Landline/ Mobile)
Email:	Email:
Fax:	Fax:

Conflict of Interest among Bidders/ Agents

A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder: found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a) they have controlling partner (s) in common; or
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; **or**
- c) they have the same legal representative/agent for purposes of this bid; or
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/
 - Assemblies from. one bidding manufacturer in more than one bid; or
- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:
 - 1. The principal manufacturer directly or through one Indian agent on his behalf; and
 - 2. Indian/foreign agent on behalf of only one principal,

or

- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid, or
- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business own'ership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.